

Parabolic Reflector Handheld Accessory



Parabolic Reflector is an ultrasonic sensor for use when detecting partial discharge activity on exposed insulating surfaces. The reflector increases the sensitivity of the sensor allowing detection to be effective at up to 25m. It is commonly used in outdoor switchyards to detect surface discharge on string and post insulators, sealing ends and other exposed equipment.

Assembly and start-up

- Remove the protective plastic film from the reflector completely.
- Put the reflector carriage on the main beam and turn the handle hand-tight.
- While assembling and disassembling, touch only the reflector carriage in order to avoid damage.
- Connect the Parabolic Reflector cable to the PD-SGS.
- Turn on the red dot sight. Choose one of the predefined light intensities for your specific lighting conditions



Use of Parabolic Reflector

With the Parabolic Reflector connected to the PD-SGS, the reflector should be pointed at the HV equipment being inspected.

Look through the view finder with both eyes open and line up the red dot visible through the view finder with the centre of the inspection area.

The PD-SGS instrument should be operated in AE Mode (See PD-SGS Operation Manual) and it will register a dB reading on the user display. It will also generate an audible output according to the level of activity detected.

It is recommended that when using the Parabolic Reflector out of doors, the headphones are worn in order to minimise interference from outside noise sources.

Owing to the nature of acoustic PD detection and natural variations caused by environmental conditions, it is recommended that PD levels identified are appraised according to their relative values when compared with other similar plant and not in absolute terms.



Maintenance and Servicing

- If necessary, clean the equipment with a damp cloth. Do not use solvents as this may damage the surface.
- After use, the equipment should be disassembled and stowed in the carrying case.
- Replace low batteries immediately with a new cell of the type CR2032 3V. The battery box is situated on the lower surface of the red dot sight.

Technical Specification

Parabolic Reflector

The parabolic dish works with the existing electronics used in our PD-SG Series, so conforms to the same specification. The unit is passive and so the signal processing and interpretation is done by the main units.

Measurement Distance	20 to 30 metres
Aiming	Laser pointed heads up display
Measurement Range	-6dB μ V to +70dB μ V
Resolution	1dB
Accuracy	\pm 1dB
Transducer Sensitivity	-65dB (0dB = 1 volt/ μ bar RMS SPL)
Calibration	The unit is supplied fully calibrated
Safety and EMC	CE-compliant in accordance with Low Voltage Directive (2014/35/EU) and EMC Directive (2014/30/EU)
Designed and manufactured in the United Kingdom	

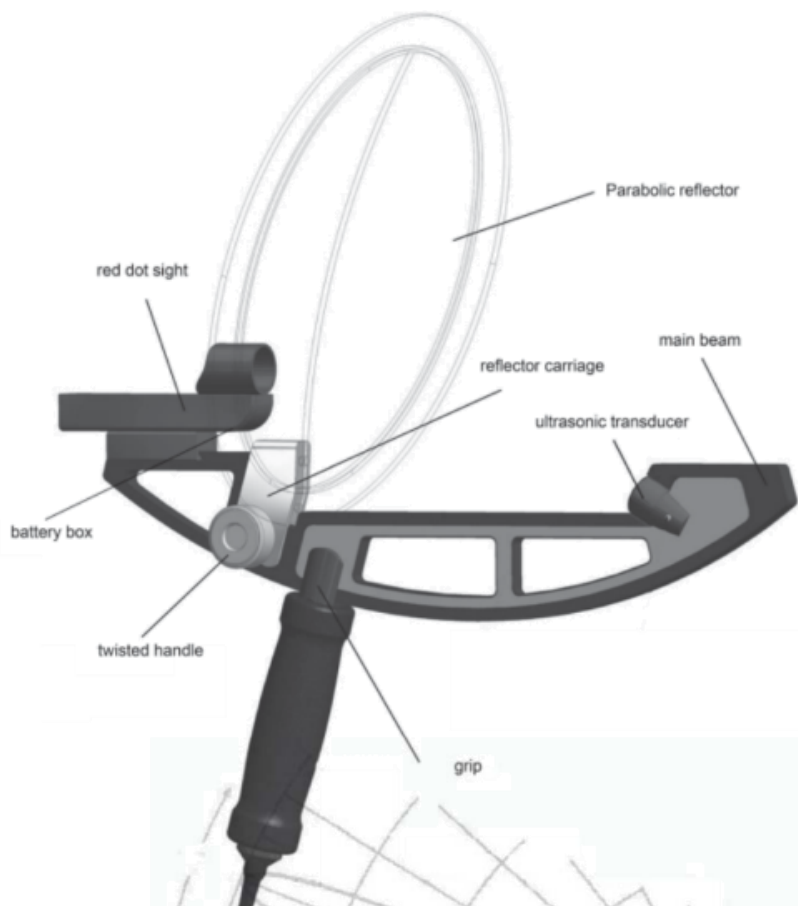
www.ipec.co.uk



The Parabolic Reflector can be use with:

PD-SGS

PD Detector



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